ABSTRACT OF THE DISCLOSURE

This melt-pourable explosive composition shares comparable explosive properties to those of Tritonal and is melt-pourable and castable under conditions comparable to those of Tritonal, but experiences equal or less impact, shock, and thermal sensitivity and avoids the issues of toxicity associated with trinitrotoluene. The trinitrotoluene component of Tritonal is replaced with one or more mononitro aromatic and/or dinitro aromatic melt-pourable binders, such as dinitroanisole, which can be melt poured without presenting the toxicity drawbacks experienced with the use of TNT. The melt-pourable binder can also be combined with a processing aid selected from the group consisting of alkylnitroanilines and arylnitroanilines. The composition also includes oxidizer particles, which are preferably inorganic oxidizer particles, and reactive metallic fuel, such as aluminum.